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Sense of place as an investigative method for the evaluation of participatory urban redevelopment

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#### ABSTRACT

This study uses 'sense of place' as an investigative method to evaluate the process and outcomes of participatory urban redevelopment in a low-income residential area of inner-city Tehran. Property owners participated in the redevelopment of their area by assembling their smaller pieces of land into larger developable parcels. Photo-elicitation methods and in-depth interviews were employed with resident participants. At different stages of this process, and in relation to different outcomes, participants narrated varying and even contradictory senses of place. They were proud to feel re-identified with their redeveloped place, because of their individual and collective involvement in a process that improved the socio-spatial conditions of their living spaces. Participants perceived loss and detachment from their place when they were unable to keep and/or re-establish the cognitive-affective-conative meanings they attached to their place. This was a result of overlooking their 'experiential perspective' in the construction of place and rapid transformations.

**Keywords:** Sense of place; Participation; Urban redevelopment; Resident participants

## 1. Introduction

In recent decades, research on 'sense of place' and related concepts has been increasingly applied to urban design, planning, and architecture, as well as environmental psychology. To prevent or minimise the undesirable outcomes of urban redevelopment, obtaining the collaboration of citizens and considering meaning and sense of place during the process has been proposed. Researchers have highlighted the significant role of place attachment in participatory processes 'to move forward conflict resolution or even consensus' (Manzo & Perkins, 2006, p.347) and aid neighbourhood revitalisation efforts (Brown et al., 2003). On the other hand, urban redevelopment can threaten a place when citizens feel excluded from decision-making processes (Chaskin et al., 2012), and their socio-spatial life is improperly changed (Güzey, 2009). As a result, citizens may lose their motivation for forthcoming participation and urban change. However, despite these reported links, sense of place has rarely been used as an investigative method to evaluate participatory urban redevelopments.

The primary aim of this study is to evaluate participation in urban redevelopment from the viewpoint of resident participants. This aim will be achieved by identifying and investigating the outcomes of participatory urban redevelopment using 'sense of place' to describe the cognitive-

affective-conative meanings attached to places, actions, and people (Lim & Barton, 2010). The study explores these meanings as they are expressed and/or illustrated in participant narratives and visual representations.

#### 1.1 Sense of place

In order to define the concept of sense of place, the notion of 'place' must be deeply understood. Massey questioned the notion of places as static and bounded areas, and reconceptualised them as certain moments when we form connections that 'can only be constructed by linking that place to places beyond' (1991, p.29). In this ontology, such moments are realised through social relations and communications with the wider world. This method of conceptualising and understanding the way places are connected to—as well as differentiated from—each other, is linked to the experience of 'time-space compression'. In this age of globalisation and technological advances, people are searching for 'a global sense of the local'. As Massey (1991, p.26) explained, 'the search for the "real" meanings of places, the unearthing of heritages and so forth, is interpreted as being, in part, a response to a desire for fixity and for security of identity in the middle of all the movement and change'.

'Sense of place' has been variously defined: as emotional and functional attachments to places (Payton et al., 2005; Mullendore et al., 2015); meanings that individuals and groups attribute to their environment in their daily social practices, which evolve over time and space (Jorgensen & Stedman, 2001), and which draw on structuration theory (Giddens, 1991); and, in relation to other concepts such as 'placelessness', 'insideness', and 'outsideness' (Tuan, 1975; 1979; Freestone & Liu, 2018). People narrate their sense of place through a combination of functional satisfaction, emotional attachment, and identification, and in turn these are affected by contextual factors, such as culture and institutions (Jorgensen & Stedman, 2006; Manzo & Devine-Wright, 2013; Lindsay & Gifford 2018). What all definitions agree on is that sense of place is a complex, vague, and relational construct subjectively experienced in the global-local world. In this study, sense of place is defined as a holistic and inclusive concept which encompasses the cognitive, affective, and conative meanings that a person/community attributes to their environment (Lim & Barton, 2010), through a non-mathematical experience of place (Cresswell, 2004). Therefore, this study considers sense of place as a multidimensional construct comprised of place attachment, place identity, and place satisfaction.

Cognitive-, affective-, and conative-based aspects can all be linked to sense of place. The cognitive-based aspect summarises personal beliefs in relation to a place: 'place identity' (Anderson, 2004; Manzo, 2005). When a neighbourhood echoes the kind of citizen a person believes they are (and others are), the person believes they can be identified through the place. However, as places combine multiple identities across space and through time, it is 'not a seamless, coherent identity, [or] a single sense of place which everyone shares' (Massey, 1991, p.28). A brief summary of (mostly positive) feelings towards a place structuralises the emotion-based aspect, namely, the 'place attachment' (Manzo & Devine-Wright, 2013). A person can be attached to a street through feelings for the relatives and friends living there, or the childhood memories formed there. The conative-based aspect refers to functional expectations of a place, or 'place satisfaction' (Stedman, 2003; Jorgensen & Stedman, 2006). A person is satisfied with a place when it

functionally offers a space for their desired activities. The place may offer proper employment, housing, payment or expected behaviours from community members, and this can make a person dependent on the place (Jorgensen & Stedman, 2001). Although all of these components may construct a positive sense of place, they can also build a negative one. When certain features of the place are in conflict with a person's self-identity or the place/community does not meet their expectations, a negative sense of place may develop (Kyle et al., 2004; Shamai, 2018).

## 1.2 Participation and urban development

In urban planning studies, participation is conceptualised as inclusive processes in decision making (Arnstein, 1969; Tosun, 1999; Farinosi et al., 2018), and is related to other concepts such as democracy and justice (Fraser, 2005; Watts & Hodgson, 2019). The International Association for Public Participation (IAP2, 2007) has interpreted the decision-making process as a spectrum with five main objectives: informing, consulting, involving, collaborating, and empowering. The objectives trace a sloping route from low to high, and the transition from informing to empowering increases the level of public impact on decision-making. Reviews of the participatory urban redevelopment of low-income areas in the UK (Dargan, 2009), Australia (Melville, 2008) and Hong Kong (Li, 2012) suggest that not only is participation in decision-making managerial, it is also political. This is because all citizens have a right to give their opinion about urban changes, regardless of their socio-economic background or legal ownership of any property.

Nabatchi (2012) proposed two key aspects in the evaluation of participatory projects: the identification and analysis of participation as a process, and its outcomes. The evaluation of the participants' experience of the process reveals the dynamic of social practice during the involvement, as well as who is involved and who is not (see Fraser, 2005). Regarding this aspect, inclusion concerns the 'access to resources, institutions, spaces, social arrangements and opportunity' produced by the process (Chaskin et al., 2012, p.846). In addition, the physical and socio-spatial changes, for instance, can be explored in terms of ownership and/or dwelling, and the outcomes can be demonstrated. These reveal what the participants gained and lost through their involvement and how it changed their place. Although in participatory urban redevelopments there is the institutional dimension (the role and performance of institutions in adopting participation), this study focuses on the process and its outcomes (Nabatchi, 2012).

The above framework was used in this research to identify the procedural and substantive outcomes of participatory urban redevelopment in a low-income residential area in Tehran. The study investigated the participants' sense of place to reveal their evaluation of the outcomes, enabling us to understand how the process was conducted in their eyes and whether the outcomes were satisfactory and fair. A people-centred evaluation is a useful research approach, as it allows the opinions of oft-forgotten locals to be brought into the evaluation of urban redevelopments. Such a neoliberalist emphasis asserts that a community is an appropriate evaluator and legitimator of the delegation of power (Herbert, 2005).

## 2. Study area and methods

#### 2.1 The Takhti neighbourhood, Tehran, Iran

Takhti is a low-income residential area with a large immigrant population, geographically located in inner city Tehran (see Figure 1). According to District 12 of the Municipality of Tehran (2011), about 85% of the residents in Takhti are immigrants from the north western cities of Iran, having moved there during the last half century. However, in the last two decades, the resident population has been declining and its negative population growth rate (about -1.3%) reflects a decline in residential function, leading to the Municipality labelling it an 'urban decay area'. However, this is a typical pattern for the neighbourhoods located in Iranian inner cities. Studying these areas reveals that such neighbourhoods gradually lose their residents, and as a consequence property prices decline. Developers have also lost interest in these areas as there are more favourable places nearby. Such issues have gradually led not only to the physical degradation of these areas but also to socio-cultural problems, although the availability of low-priced housing in these areas has enabled low-income immigrants to settle within them.

As reported by the Local Office of Takhti (2014), most plots (51.1%) within the neighbourhood were less than  $100\text{m}^2$ , which is considered undevelopable for residential use. In addition, low-width paths have made these areas inaccessible. For instance, the Edalat lane was considered one of the most inaccessible routes within the entire neighbourhood. Here, about 75 plots, mostly owned by separate residents and smaller than  $50\text{m}^2$ , were situated around a path with a width of about 1.5m (Figure 2). Due to the vast area of the neighbourhood (85 hectares), redevelopment of the whole area required huge funds, and so to reduce redevelopment costs and displacement, the authorities decided to redevelop the area with the involvement of the landowners, who comprise the majority of residents (over 70%) in Takhti.

## 2.2 The process of participatory urban redevelopment

To engage with local residents and encourage them to enter into the participatory redevelopment process with new skills, the Municipality of Tehran opened a neighbourhood office in 2009, and conducted cultural awareness training sessions for residents, e.g. the culture of living in flats. In 2012, the office invited those residents who could officially demonstrate their ownership rights to assemble their smaller pieces of land into larger developable parcels (land assemblage). The idea was that owner participants would provide land, while developers recognised by the local office would fund the construction costs. Typically, three to five two-storey houses were being redeveloped in favour of new five-storey blocks of flats (Figure 3). Concurrently, the Municipality was in charge of the infrastructure, but the local office facilitated and monitored the legal and technical dimensions of this process, by identifying developable projects and reaching agreements between participants and developers across the neighbourhood. Figure 4 shows the progression of the redevelopment process at the time of data collection (2014). Developers were responsible for renting homes for participants during the reconstruction period, as well as consulting them regarding architectural issues and construction materials. Typically, after any redevelopment project, about 40% of the unit area of each newly constructed building was divided between the participants who had conjoined their land. The extra new flats (60% of the total unit area) were sold by the developer to recover costs. This formulation was subject to change with variations in land value as a result of redevelopment progression and location; for example, the formula was changed in the favour of participants who entered the process late. An additional feature of the process was that individual migrants (who had previously occupied densely populated rental properties in the neighbourhood) were replaced, mainly by owner incomers but also by new buyers (mostly young couples).

# 2.3 Methods

This study applied a range of qualitative techniques for data gathering and analysis. Data were collected in three successive phases—field observations, photo-elicitation, and in-depth interviews—from 15<sup>th</sup> May to 15<sup>th</sup> September 2014, as part of a larger research study. This triangulation permitted validation of the findings and ensured reliability. Interviewees were recruited by approaching the local office, which acted as the gatekeeper to the local community. The sample size included 19 locals (10 female and 9 male) with an average length of residence of 24 years in Takhti. The interviewees were randomly selected after they had agreed to take part in the study (volunteer bias), but provision was made to ensure roughly equal representation of females and males and an age span of 20–70 years. Interviews were transcribed (including pauses and nonverbal expressions, such as laughter) and translated from Persian to English by the researcher. A thematic analysis was then completed by a careful reading of the transcripts (and field records) and descriptive codes were developed (e.g. comments on what participants gained/lost from participating in the project). Designated analytical themes were then related to substantive and procedural outcomes.

In the first phase, the researcher directly observed and took field notes on both the physical condition of new and old buildings and public spaces, and the typical activities of the residents, such as walking and gathering. The focus was on: whether the buildings were well maintained or deteriorating; whether the neighbourhood was untidy because of the redevelopment process; and, where the private and public realms were located (see Figures 5 and 6). Before chatting with the locals, 15 observation visits were conducted at different times and completed in ten days; this gave the researcher a more in-depth understanding and interpretation.

In the second phase, the researcher conducted a photo-elicitation interview (PEI) (Tonge et al., 2013) to collect individual visual interpretative data from resident volunteers. Two weeks prior to the interviews, six locals agreed to capture six to eight photos representative of their neighbourhood and the places within it. The research participants produced 41 photo-narratives. Later, they were invited to an in-depth interview covering the following topics: (1) visual interpretative data; (2) perceptions and meanings of places before, during and after the redevelopment; (3) involvement role and experiences; (4) expectation and self-reported effects of the process/outcomes on their sense and behaviours; and (5) demographics. A copy of the questions on each topic is included in Appendix A.

For the third phase, new local interviewees (different from the PEI phase) were interviewed indepth to investigate the above topics, and to reveal their responses to the results of the previous phase, including photos and narratives. In this way, the collective approach was revealed as it allowed discussion of the issues identified as individual interpretative data, to realise whether these issues were shared with other locals. These in-depth interviews were conducted until 'saturation

point' (see Kvale, 2008), at which time the interviewees were repeating ideas raised by others. In this phase, 13 new local interviewees took part.

#### 3. Results

The results of this study are presented under the two main themes of the substantive and procedural outcomes—each of which discusses one dimension of participatory urban redevelopment in the Takhti neighbourhood. First, the substantive outcomes consisted of the redevelopment of private spaces, the creation of shared spaces in new buildings, and the enlargement of publicly available spaces, such as narrow lanes. Participants both gained and/or lost through this transformation. Second, the procedural outcomes related to the personal and collective experiences of involvement in the process. Participants individually and collectively practised land assemblage, reconstruction, and engagement with their neighbours, developers, and the local office. Through this process, they experienced enjoyment and/or suffering, felt included and/or excluded, and perceived that they had been sufficiently or insufficiently informed and consulted.

#### 3.1 Substantive outcomes

## 3.1.1 Sense of gain

This study found that at the early stage of the redevelopment, the participants who had recently moved into newly reconstructed flats expressed satisfaction with their private space. They evaluated their living space before and after the redevelopment. For each square metre area of land, they gained about  $1.2\text{m}^2$  in a reconstructed flat, as well as new spaces for other activities, e.g. car parking (Figure 3, right). To an owner participant, the increase in living area, improved physical conditions, and receipt of new spaces were both positive substantive outcomes and personal gains. This improved the individual operative evaluation regarding private space redevelopment.

The enlargement of the publicly available spaces improved the accessibility of the neighbourhood. As a result of redevelopment, the area also became unaffordable for the drug users and dealers who had lived there. These changes resulted in an improvement in the perception of in-place security. In the locals' eyes, the transition from a stigmatised area to one with a lower crime rate was another positive outcome, as well as a collective gain. From this angle, the sociospatial changes were satisfactory as they revised how locals perceived their place. The sense of gain on both personal and collective levels was reported by interviewees:

The first new building reconstructed in the Edalat lane was mine. Now, it's about one year that I've been living in my new flat. I like it as I've got more spaces in my home... Cars can [also] come inside the lane and building easily, which is more convenient compared to what we had before [the redevelopment] ... our earlier houses were timeworn with unsafe wooden roof and steps. (42-year-old female participant)

Our neighbourhood was insecure and disordered, but after the participation it seems much better...rising property prices have made our neighbourhood unaffordable for very poor people such as drug users... It is changing here. (51-year-old male participant)

#### 3.1.2 Sense of loss

The evidence from the interviews revealed that after a period of experiencing the redeveloped spaces, participants perceived a loss in their reconstructed private and public spaces. They missed the benefits of a one- or two-storey house with a yard alongside the neighbours, and living in a flat was not yet accepted as a norm. For a 63-year-old male participant, who had lived in the area for 40 years, 'living in a flat is like being in jail; you go inside and lock the door. We had a yard and she [his wife] stayed there... I don't mean I hate flats, but a flat like this is inappropriate. I will probably sell here and try to find a house [with a yard] nearby'. These views reveal that, while he was functionally satisfied with his flat, emotionally he had a personal sense of loss for his previous socio-spatial settlement pattern. Other interviewees with longer residency also repeated that they were pushed into the socio-spatial reorganisation of their lifestyle.

The loss of, or damage to, privacy is another perception of loss associated with the transition from individual to shared ownership. Before redevelopment, each owner was responsible for the maintenance and management of their living space. However, after redevelopment, the sociospatial circumstances changed. Several reconstructed flat dwellers complained about this by saying: 'One key has been changed into twenty'. They noticed that distant neighbours were now involved in decision making regarding their private realm. More importantly, the new settlement limited their lifestyle. Before redevelopment, individual private ownership allowed any owner to use their living realm freely according to their daily needs. For example, women in Edalat Lane used their yard as a cooking area and after supper chatted with their neighbours while sitting on the front steps of their house—a common memory shared by the elder residents. These daily practices allowed them to establish or maintain social ties and community networks. However, continuing this lifestyle in the new settlement might have created conflict with other flat dwellers. In addition, new owners had arrived with different socio-cultural and spatial practices. Daily encounters in the new settlement between old neighbours and newcomers with potentially different lifestyles created some tension, partially due to the practised meaning of having owned (or not) a house for many years among the old neighbours, who had resided in a territory in which they could freely use and control the spaces they owned. Re-applying such meaning to new spaces in the blocks of flats was not accepted (or not known) by most newcomers. These elements that limit privacy and spatial control, and may also reduce place satisfaction, were illustrated by the following interviewees:

It's true these reconstructions have some benefits but also they have caused some problems; for example, your home [flat] is not under your control anymore, you need to please all different [types] of people living in the building with twenty or thirty flats; one is pleased and another is not! My previous house was small, but it was under my control. (37-year-old female participant)

If the neighbours stand at their front door chatting, once someone from outside the area comes here, the person would have a negative idea about the area... the individual may even say the residents of this lane all are the same! (31-year-old female participant)

The transition also delivered a new common realm within the blocks of flats, whereas prior to redevelopment there was the dichotomy between the public and private realm (Figures 5 and 6). The new shared spaces highlighted issues of shared ownership and created a potential source of tension and disagreement, as the residents did not have enough experience in managing and maintaining them. Flat-dwellers frequently mentioned their disputes over payment for charges relating to their shared spaces due to the lack of a 'culture of living in flats'. A flat-dweller, who was also the building manager, stated, 'When you ask a flat's resident to pay their share, the resident might not accept such charges, or one of the residents was unfamiliar with the lift, he was stuck in the lift for more than two hours'. For this resident, the new-shared spaces like the lift, lobby, staircases, parking areas, and roof are 'a common pain'. In the flats with fewer disputes, the residents revealed that they used the shared spaces for daily meetings and informal gatherings. This viewpoint suggests that the participants interpreted the substantive outcomes as damaging to their socio-spatial connections and sense of community, and also felt that they created social tension.

## 3.2 Procedural outcomes

#### 3.2.1 Environmental awareness

The residents of Takhti used to live in houses with minimum living standards, and in general, they had become used to their place. However, this perception changed considerably once the initiative was launched. At the planning stage, to motivate owners to enter the process, they were routinely informed, consulted and encouraged to be critical of their built environment, such as by labelling their place with terms that mostly have negative connotations, for example, an 'unstable building', 'urban decay' and 'inaccessible area'. A 50-year-old female flat-dweller participant commented: 'I know what a "decaying area" is and so on, so I learned some stuff [during the process], because before I never thought about these issues'. This participant was trained to evaluate their environment, mainly by problematising the fabric. This problematisation resulted in improving environmental awareness among the participants, and at different stages of the process, they also expressed a hierarchy of priorities in representing their environment. Indeed, discussing these findings in relation to the local planners' role in imposing their assessments on locals could be the focus of another study.

In the photo elicitation phase of the research, individuals living in a house of low minimum standard conditions highlighted their indoor spaces in their narratives and photographs (Figure 7). One participant, who was waiting for his new flat to be constructed and living in a rented place, even captured photos of his neighbour's indoor spaces to highlight the poor conditions before redevelopment. On the other side, flat-dwellers simply captured photographs representing outdoor spaces (Figure 8). This fact indicates how locals perceived the surroundings and defined their priorities. In their eyes, indoor spaces were foregrounded, but once they were addressed, the

outdoor spaces were questioned. Within all the representations, this transition of the sense of living in a low-quality environment from indoor into outdoor space was a common issue, and generated (temporary) place dissatisfaction which motivated the locals to participate. However, place dissatisfaction may not have been a persuasive enough reason for every owner to enter the process, so authorities also informed participants by highlighting financial benefits, as explained in Section 3.1.1.

## 3.2.2 Social practice

Some participants proudly narrated how their experience of involvement as a socio-cultural practice resulted in the improvement of their place. This perception could have been because of physical and spatial status improvements, leading to substantive outcomes. Alternatively, the perception may have been due to being involved in the improvement, or to outsiders' recognition of the reconstructed place. Individually or in combination, these factors led to procedural outcomes. Discussing this finding (see Section 4.2) demonstrates the social practice aspect of the process and helps to differentiate the substantives from the procedural outcomes.

The participants' experience of a different social dynamic model during their involvement was another major finding. The process included owners but excluded renters. While owner participants benefited from the process, renters may have had to leave as newcomers arrived, resulting in the displacement of low-income groups who were mainly renters. Every local constantly perceived themselves and others as either an owner or non-owner, who was benefited or harmed by the process, as well as other socially constructed divisions. This indicates how the perception of community was different for each of these social groups, and may have produced social conflict and the fragmentation of community networks. This perception was often reflected in the narratives of interviewees who imagined owner participants as 'we' and non-owners as 'they':

We [the five owners who assembled our lands] used to live in a single lane; we only knew each other a little and were not that connected, but we got to know each other better during the participation. Now, we, the five owners, are more in touch than them [the five new residents]. (47-years-old female participant)

... Since renters do not own any property, we [owners] cannot do anything for them [renters]. (43-years-old male participant)

One of my relatives who lives in Germany one day came here and told me "your flat looks like a high-class building", but I learned [during the process] that people make a neighbourhood good or bad; it's not only about houses. People may promote or worsen a neighbourhood. (52-years-old female participant)

Whenever they [local authorities] want to show a participatory project and land assemblage to someone, they come here. (63-year-old male participant)

#### 4. Discussion

This section discusses the results to explore whether the participatory urban redevelopment was successful in improving the substantive and procedural outcomes, and if these outcomes strengthened the sense of place.

# 4.1 Substantive outcomes and sense of place

All the positive evaluations reported by resident participants as a sense of gain confirm the association between the socio-spatial and physical improvements, as well as place satisfaction (Li & Song, 2009). Participants understood and sometimes interpreted how well redeveloped spaces provided opportunities for their personal and collective growth. Once a redeveloped private space offered an improved living space for daily life, the participants interpreted the redevelopment as an opportunity for their personal growth, and when it was about public security, the opportunity for their collective growth was a bonus. Once a place redevelops in such a way as to improve and provide the space for desired daily activities, then the place redevelopment is interpreted as self-development (Stedman, 2003). This also enhances place satisfaction and may make the person dependent on the place (Jorgensen & Stedman, 2001; Yuksel et al., 2010). Nevertheless, enhanced place satisfaction is insufficient evidence to prove that all substantive outcomes have improved the sense of place.

One important result indicated by ten participants was the perception of a sense of loss and detachment experienced only after the redevelopment of the spaces. This supports the idea of place as 'a construct of experience' (Tuan, 1975, p.165). For these resident participants, home was a paradigm of a yard with the neighbours around, and their 'experiential perspective'. Regardless of this fact, the redevelopment established the private setting as an 'abstract and distanced' space, and not as an 'embodied and close' place (Hung & Stables, 2011, p.199). This overlooked the fact that socio-spatial practices lead to the construction of place (Harvey, 1993; Cresswell, 2004) and damage the emotional bond between the participants and place (Florek, 2011). These results can also be explained by the fact that the participants were not informed and consulted sufficiently about the outcomes. They were informed and consulted about the amount of the reconstructed space they would gain, but they were not made fully aware of the socio-spatial conditions of their new living spaces. The identification of a mismatch between the participants' expectations and the substantives only after experiencing them demonstrates the limited nature of the informing and consulting process.

The results also revealed the significance of the length of dwelling time in the construction of an emotional bond between the place and the person. For the participants with longer residency who were functionally satisfied with their place, the detachment was a strong enough reason to sell their flat and find a house with a yard to live in, even though their former socio-cultural relations may not have been promising. They perceived 'disruption in place attachment' (Brown & Perkins, 1992) due to the rapid 'spatial transformation of the existing milieu and lifestyle' (Breux & Bédard, 2013, p.75). The redevelopment enhances the function and utility of places, but also rapidly interrupts the socio-spatial patterns (privacy and spatial control) practised for decades. These outcomes can even lead to the perception of being out of place and could have damaged

place identity, as residents did not seem to be able to identify with the redeveloped place 'as being part of the extended self-concept' (Droseltis & Vignoles, 2010, p.24).

Participants' memories of their relationship to a house represented their own sense of privacy and spatial control, and may be explained by a strategy of territoriality—'a spatial strategy to order our universe by defining places and bounding them' (Clark, 2015). There is an inherent tendency among humankind to define their own places in exclusion from others, and the resident participants in this study had practised this human appetite for many years. Hence, it was more natural for them to highlight living in a house as a (lost) territorial ideal in their narratives. These findings confirm the expression of a 'sense of territoriality' as another key component in the construction of place (Knox & Pinch, 2010, p.194). This has implications for re-thinking about the role of 'territoriality in spatial development' (Luukkonen & Moilanen, 2012) which, if overlooked, may lead to a reduction in the quality of outcomes and place detachment, as it did in this study.

Regarding the issue of flats versus houses and sharing ownership, we need to consider that this is a general trend across the city of Tehran, as citizens are constantly losing their houses to flats. On one side, the lifestyle is changing and inhabitants do not use outdoor spaces such as yards and front steps as they used to. On the other side, spatial-economic gain is another driver of this trend. In the highly populated and high-density city of Tehran, the strong demand for living space has greatly increased land value and the city is expanding vertically. Citizens are tempted to sell their house to buy a flat, in the expectation of gaining a larger flat with fewer maintenance costs. During this transition, they sacrifice privacy and spatial control for spatial-economic value. The citizens share their ownership as they need to adapt their lifestyle to the new conditions. Currently, the majority of the inhabitants in Tehran are flat dwellers. However, not every citizen is necessarily satisfied with this general trend (Lindsay et al., 2010; Dempsey et al., 2012). As mentioned earlier, they may be interested in a house with a courtyard, but in such a high-priced and highly dense city this is no longer affordable. Therefore, the issues of place detachment and loss of community networks may not merely be substantive outcomes of the participatory urban redevelopment, but general complaints about the loss of socio-spatial spaces across Tehran.

Nevertheless, the houses in the study were typically tiny plots, and so spaces like yards and front steps played an important role in the residents' everyday life as kitchens, gathering places and a 'social space for connecting with neighbours' (Dahmus & Nelson, 2014, p.185), as well as for other functions. This is one reason why participants emphasised the loss of such spaces, even when it may be an accepted fact in a wider context. The transition may also have seemed more problematic because it occurred quickly for many owners, who had no experience of shared ownership, and who may have needed more time to adapt to the new shared circumstance.

#### 4.2 Procedural outcomes and sense of place

A key procedural outcome that became apparent through the interviews was the experience of social practice during the process. Participants often mentioned how 'we did this', emphasising their collective involvement. In their everyday practice, they perceived the meaning of place as a self-conscious combination of interaction with elements of the (newly reconstructed) built-environment and other citizens' communication patterns and collective behaviours. These results can be interpreted through structuration theory (Giddens, 1991; Knox & Pinch, 2010, p.198),

which explains the meaning of place through everyday social practices in time and space. Promoting these social practices in the public agenda as a positive participatory project across the city is valuing the meaning of a place of which participants are proud. The recognition of this meaning by outsiders is also acknowledgement of the place identity as the socio-cultural meaning of the place (Carmona et al., 2010, p.116), which made the participants (the insiders) value their collective involvement in the process.

On one side, the participants perceived improvements in the evaluation of reconstructed living spaces, and these were desirable substantives. In monetary terms, they were better off, leading to social class improvement as a result of gaining reconstructed private space, and they wanted to be re-identified by their larger and securer living place. On the other side, the participants experienced how these improvements resulted from their individual/collective involvement, and how this was presented to outsiders as an encouraging experience of participatory urban redevelopment. More importantly, through their experience, participants were able to reconstruct further deep links with their place, revealing how the place held meaning for them. They understood and interpreted their 'material spatial practice' as an individual and social experience of space leading to 'economic production and social reproduction' (Knox & Pinch, 2010, p.199). All these experiences of involvement in the socio-economic and spatial upgrading generated pride in the place 'as a process, rather than a static entity' (David et al., 2005, p.397). However, the entire experience may not have been so encouraging.

Resident participants problematised the built environment according to their priorities and needs. The results show that they were mainly encouraged to evaluate the operative meanings of their built environment in terms of place satisfaction, but, as demonstrated in Section 3.2.1, this was less about the socio-spatial outcomes and opportunities that their place offered. This finding supports the idea of using place satisfaction as encouragement, bribery or coercion, since there is a fine line between pushing people to enter a participatory process, which is coercion, and encouraging people to be aware of their environment. Participants were also offered alternatives simply to answer the operative evaluation, e.g. accessible areas and/or economic profit. These results do not align with what the International Association for Public Participation (2007) has proposed to provide 'the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities, and/or solutions ... [and] acknowledge [their] concerns and aspirations, and provide feedback'. However, at the implementation stage, participants' concerns about the reconstruction of the place were listened to and acknowledged, to some extent. For instance, the evidence revealed that some developers and technical supervisors in the later reconstructions were changed after the complaints of five participants. This indicates induced participation—or 'participation in implementation and sharing benefit'—and possibly coercive involvement rather than spontaneous participation in decision making (Tosun, 1999, p.118).

There were conflicts within the community which certain ideas and approaches could have overcome. Moreover, the results show how opposites were negotiated during the decision-making process, and how this normally happened. As Herbert (2005) indicates, participants experience 'heterogeneity' and the 'ecology of fear' as controversial elements in relation to the concept of community. There was a daily practice of us versus them, owners versus non-owners, and early takers versus later participants. Cultural differences between newcomers and old residents were

also a barrier in shaping the community. Renters may also have been reluctant to label themselves as insiders, commonly counting themselves as 'temporary residents' (Hooper & Cadstedt, 2014) when they knew they would leave. However, there were no significant concerns about the displacement of renters and protecting their interests (He & Wu, 2007), for two reasons: the majority of residents were owners (over 70%), and ownership as the basis for participation was socio-contextually acknowledged within the community.

However, the fragmentation of community networks and the reduction of social ties cannot be solely explained by procedural outcomes. From a wider viewpoint, 'globalisation' (Knox, 2005) and 'technological innovation' (Willson, 2010) have accelerated the destruction of community networks and changed place-based communities to communities of interests. This is a general and natural process of change happening in almost every community, including the community examined in this study. In addition, owner participation did not entirely lead to the fragmentation of community members. As the narratives in Section 3.2.2 demonstrate, the owners who assembled their lands perceived improved social ties with each other, because they had experienced a rebuilding of trust and participated in further social engagements during the process. This social practice constructed a collective sense of a community of interests and circumstances, reasserting the link between participation and sense of community (Talò et al., 2014). From this angle, the initiatives improved the sense of community and community networks rather than splitting it.

What we learn about the relationship between participatory urban development and sense of place is that appropriate systems, services, and support for informing and consulting the community—not only the owners—should be a high priority for institutions and local offices. There are many reported cases of participatory urban (re)development around the world (Nabatchi & Leighninger, 2015), including cases that adopted assembled lands in their processes, such as in Turkey (Turk & Korthals Altes, 2010a; 2010b) and the Netherlands (Louw, 2008). These demonstrate that once each local person feels sufficiently informed about outcomes (including undesirable ones), is listened to, and has their concerns and aspirations acknowledged, with feedback given, then the community will countenance further involvement in the planning and decision-making process, as advocated by IAP2 (2007). This reduces the limitations of the process and consequently improves the quality of the procedural outcomes and sense of place.

Another important strategy is planning for the long-term care of participatory urban redevelopment. There is a definite need for ongoing assessment of the process and its outcomes, not only at the planning stage but also during the implementation and in-use stage. Once a participatory urban redevelopment is planned on land assemblage, it is essential to assess all the socio-economic, spatial, and environmental impacts that this method may have on the community's everyday life during and after the process—confirming the link between 'everyday life and sustainable urban development' (Middleton, 2011). The institutions should inform and consult, and have a plan that considers the everyday life and business of all the different socio-economic groups including renters and newcomers during the transition period. Overlooking this fact can create place dissatisfaction, detachment, and a sense of exclusion. Such a long-term plan should also consider the availability and equality of access to socio-economic and spatial resources. Unless the process adopts these strategies, better outcomes and sense of place will not be attained.

## 4.3 Ambivalent perceptions

The results demonstrate that there is a paradox in terms of the outcomes and sense of place. While outcomes can improve place identity, they can also engender dissatisfaction and detachment, or even the reverse—ambivalence. The inter-relationships between different aspects of sense of place may also change perceptions. These results are in line with what the literature (Stedman et al., 2004; Manzo & Devine-Wright, 2013) highlights in investigating sense of place as a holistic, complex, and multi-dimensional concept that cannot be fragmented into precise, measurable variables, and then reintegrated through multivariate modelling. The present study confirms these previous findings and contributes additional evidence that suggests people may have dissimilar opinions about their places at different stages of their life (Beazley, 2000; Mowl et al., 2000), and indeed at different stages of any process that requests the spatial and socioeconomic reorganisation of their life. In the informing and consulting stage, participants became critical of their place as they had been trained to (place dissatisfaction) and were excited about the process and what they might gain from it. They also developed a heightened awareness of their social value. During redevelopment, the process created socially constructed divisions, which made them feel dissatisfied and excluded. After the experience, participants were proud of being re-identified through their collective socio-spatial practice. These elements show the complexity and diversity of perceptions at different stages of the process.

#### 5. Conclusions

The participatory urban development adopted by the Municipality of Tehran was a stepforward, but it did not amount to much due to certain undesirable outcomes and serious limitations. At different stages and in relation to different outcomes, the participants' evaluations were multifaceted.

To a certain extent, the process enhanced the sense of place, but in the longer term all of the substantives did not do so. The participants were clearly proud to be identified by their place because they gained improved, larger, and safer spaces as their substantive outcomes, and had been individually and collectively involved in the process. Recognition by outsiders of their redeveloped place as a result of their socio-spatial practice, in particular institutions, contributed to their enhanced collective sense of place, as a procedural outcome. However, the participants perceived a sense of loss and detachment to their place once they were unable to keep or reestablish their cognitive-affective-conative relationships with it due to its rapid transformation. Overlooking the fact that place is a construct of experience and ownership is interpreted and expressed through territoriality, the socio-spatial substantives were the key drivers of these perceptions, alongside limited informing/consulting. Thus, the inclusion of socio-spatial factors in the process also matters. Once equality of access to resources is overlooked or minimised, community members also perceive a sense of exclusion and detachment, which may damage social sustainability. Nevertheless, as mentioned, such undesirable outcomes may not be exclusive to this study, and indeed some result from the larger socio-economic and political status of the city.

Although the results of this study offer generalisations on investigating sense of place during the process of participatory urban redevelopment, the study has its own limitations, and provides opportunities for future studies. One limitation is that this research was conducted during an ongoing process in which the results were not final at the time of study. As sense of place is a dynamic and subjective concept, the assessment of the process may change in terms of building on this criterion across space and through time. Additional work is therefore required to assess the entire process once completed. As such, further research that studies sense of place after the completion of the process would provide valuable insights into links with concepts such as the impact of the participatory redevelopment on the environmental perception and the display of 'proenvironmental behaviours' (Ramkissoon et al., 2013) within the community.

Nevertheless, from another angle, this study was a unique opportunity to assess participatory urban redevelopment in the middle of the process, leading to a deeper understanding of it and revealing hidden outcomes which might not have been possible once the process is complete. Another area for future research should be an exploration of the reflections of the local community on the results of this study, and indeed it is ethical to provide feedback if promised to research participants about findings. It would be valuable to see how the interviewees reflect on the procedural and substantive outcomes and whether they agree or not, as potentially they may have different narratives and senses of place.

#### References

- Anderson, J. (2004). The ties that bind? Self- and place-identity in environmental direct action. *Ethics, Place & Environment*, 7(1-2), 45-57.
- Arnstein, S.R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216-224.
- Beazley, H. (2000). Home sweet home?: Street children's sites of belonging. In Holloway, S.L., Valentine, G. (Eds.), *Children's Geographies: Playing, Living, Learning.* London: Routledge.
- Breux, S. & Bédard, M. (2013). The urban project and its impact on sense of place: Methodological propositions. *Geography Compass*, 7(1), 75-84.
- Brown, B., Perkins, D.D. & Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. *Journal of Environmental Psychology*, 23(3), 259-271.
- Brown, B.B. & Perkins, D.D. (1992). Disruptions in place attachment. In Altman, I. & Low, S.M. (Eds.), *Place attachment* (pp. 279-304). New York: Plenum.
- Carmona, M., Heath, T., Tiesdell, S. & Oc, T. (2010). *Public places urban spaces: The dimensions of urban design*. Oxford: Routledge.
- Chaskin, R., Khare, A. & Joseph, M. (2012). Participation, deliberation, and decision making: The dynamics of inclusion and exclusion in mixed-income developments. *Urban Affairs Review*, 48(6), 863-906.
- Clark, W.A. (2015). Neighbourhoods and the structure of society: Implications for work and residence in the Internet Age. In Mason, C., Reuschke, D., Syrett, S. & van Ham, M. (eds.) *Entrepreneurship in cities: neighbourhoods, households and homes* (pp. 39-57). Cheltenham: Edward Elgar.
- Cresswell, T. (2004). Place: A short introduction. Oxford: Blackwell.
- Dahmus, M.E. & Nelson, K.C. (2014). Yard stories: Examining residents' conceptions of their yards as part of the urban ecosystem in Minnesota. *Urban Ecosystems*, 17(1), 173-194.

- Dargan, L. (2009). Participation and local urban regeneration: The case of the new deal for communities (NDC) in the UK. *Regional Studies*, 43(2), 305-317.
- David, S., Charles, H. & Nick, S. (2005). An exploration of place as a process: The case of Jackson Hole, WY. *Journal of Environmental Psychology*, 25(4), 397-414.
- Dempsey, N., Brown, C. & Bramley, G. (2012). The key to sustainable urban development in UK cities? The influence of density on social sustainability. *Progress in Planning*, 77(3), 89-141.
- District 12 of the Municipality of Tehran (2011). *Takhti neighbourhood development document*. Tehran: Municipality of Tehran.
- Droseltis, O. & Vignoles, V.L. (2010). Towards an integrative model of place identification: Dimensionality and predictors of intrapersonal-level place preferences. *Journal of Environmental Psychology*, 30(1), 23-34.
- Farinosi, M., Fortunati, L., O'Sullivan, J. & Pagani, L. (2018). Enhancing classical methodological tools to foster participatory dimensions in local urban planning. *Cities, Available online 16 November 2018*.
- Florek, M. (2011). No place like home: Perspectives on place attachment and impacts on city management. *Journal of Town & City Management*, 1(4), 346-354.
- Fraser, H. (2005). Four different approaches to community participation. *Community Development Journal*, 40(3), 286-300.
- Freestone, R. & Liu, E. (Eds.) (2016). *Place and Placelessness Revisited*. New York: Routledge. https://doi.org/10.4324/9781315676456
- Giddens, A. (1991). Structuration theory: Past, present and future. In Bryant, C.G.A. & Jary, D. (Eds.), *Giddens' theory of structuration: A critical appreciation*. London: Routledge.
- Güzey, Ö. (2009). Urban regeneration and increased competitive power: Ankara in an era of globalization. *Cities*, 26(1), 27-37.
- Harvey, D. (1993). From space to place and back again: Reflections on the condition of postmodernity. In Bird, J., Curtis, B. Putnam, T. & Robertson, G. (Eds.), *Mapping the futures: Local cultures, global change*. London: Routledge.
- Herbert, S. (2005). The Trapdoor of Community. *Annals of the Association of American Geographers*, 95(4), 850-865.
- He, S. & Wu, F., (2007). Socio-spatial impacts of property-led redevelopment on China's urban neighbourhoods. *Cities*, 24(3), 194-208.
- Hooper, M. & Cadstedt, J. (2014). Moving beyond 'community' participation: Perceptions of renting and the dynamics of participation around urban development in Dar es Salaam, Tanzania. *International Planning Studies*, 19(1), 25-44.
- Hung, R. & Stables, A. (2011). Lost in Space? Located in place: Geo-phenomenological exploration and school. *Educational Philosophy and Theory*, 43(2), 193-203.
- International Association for Public Participation. (2007). *Public participation spectrum*. Retrieved from http://www.iap2.org/.
- Jorgensen, B.S. & Stedman, R.C. (2001). Sense of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of Environmental Psychology*, 21(3), 233-248.
- Jorgensen, B.S. & Stedman, R.C. (2006). A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties. *Journal of Environmental Management*, 79(3), 316-27.
- Knox, P.L. (2005). Creating ordinary places: Slow cities in a fast world. *Journal of Urban Design*, 10(1), 1-11.
- Knox, P.L. & Pinch, S. (2010). *Urban social geography: An introduction*. New York: Pearson Prentice Hall.
- Kvale, S. (2008). *Doing interviews*. London: Sage Publications.

- Kyle, G., Graefe, A., Manning, R. & Bacon, J. (2004). Effects of place attachment on users' perceptions of social and environmental conditions in a natural setting. *Journal of Environmental Psychology*, 24(2), 213-225.
- Li, L. (2012). Urban renewal partnerships—is there really room for participation from individual owners? A case study of Hong Kong. *Journal of Housing and the Built Environment*, 27(4), 517-526.
- Li, S.-m. & Song, Y.-l. (2009). Redevelopment, displacement, housing conditions, and residential satisfaction: A study of Shanghai. *Environment and Planning A*, 41(5), 1090-1108.
- Lim, M. & Barton, A.C. (2010). Exploring insideness in urban children's sense of place. *Journal of Environmental Psychology*, 30(3), 328-337.
- Lindsay, M., Williams, K. & Dair, C. (2010). Is there room for privacy in the compact city? *Built Environment*, 36(1), 28-46.
- Local Office of Takhti, Tehran City Renovation Organisation (2014). Progress report of Takhti neighbourhood. (Unpublished report)
- Louw, E. (2008). Land assembly for urban transformation—The case of 's-Hertogenbosch in The Netherlands. *Land Use Policy*, 25(1), 69-80.
- Luukkonen, J. & Moilanen, H., (2012). Territoriality in the strategies and practices of the territorial cohesion policy of the European Union: Territorial challenges in implementing "soft planning". *European Planning Studies*, 20(3), 481-500.
- Manzo, L.C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of Environmental Psychology*, 25(1), 67-86.
- Manzo, L.C. & Devine-Wright, P. (2013). *Place attachment: Advances in theory, methods and applications*. London: Routledge.
- Manzo, L.C. & Perkins, D.D. (2006). Finding common ground: The importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20(4), 335-350.
- Massey, D. (1991). A global sense of place. Marxism today, 38, 24-29.
- McCunn, L.J. & Gifford, R., (2018). Spatial navigation and place imageability in sense of place. *Cities*, 74, 208-218.
- Melville, R. (2008). *Token participation to engaged partnerships: Lessons learnt and challenges ahead for Australian not-for-profits*. Retrieved from http://www.dss.gov.au/our-responsibilities/communities-and-vulnerable-people/publications-articles/.
- Middleton, J. (2011). "I'm on autopilot, I just follow the route": Exploring the habits, routines, and decision-making practices of everyday urban mobilities. *Environment and Planning A*, 43(12), 2857-2877.
- Mowl, G., Pain, R. & Talbot, C. (2000). The ageing body and the homespace. *Area*, 32(2), 189-197.
- Mullendore, N.D., Ulrich-Schad, J.D. & Prokopy, L.S. (2015). US farmers' sense of place and its relation to conservation behavior. *Landscape and Urban Planning*, 140, 67-75.
- Nabatchi, T. (2012). *A manager's guide to evaluating citizen participation*. Washington, DC: IBM Center for The Business of Government.
- Nabatchi, T. & Leighninger, M. (2015). *Public participation for 21st century democracy*. Hoboken, NJ: John Wiley & Sons.
- Payton, M.A., Fulton, D.C. & Anderson, D.H. (2005). Influence of place attachment and trust on civic action: A study at Sherburne national wildlife refuge. *Society & Natural Resources*, 18(6), 511-528.
- Ramkissoon, H., Smith, L.D.G. & Weiler, B. (2013). Relationships between place attachment, place satisfaction and pro-environmental behaviour in an Australian national park. Journal of Sustainable Tourism, 21(3), 434-457.

- Shamai, S. (2018). Measuring negative sense of place: Israeli settlers' forced migration. *GeoJournal*, 83(6), 1349-1359.
- Stedman, R. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society & Natural Resources*, 16(8), 671-685.
- Stedman, R., Beckley, T., Wallace, S. & Ambard, M. (2004). A picture and 1000 words: Using resident-employed photography to understand attachment to high amenity places. *Journal of Leisure Research*, 36(4), 580-606.
- Talò, C., Mannarini, T. & Rochira, A. (2014). Sense of community and community participation: A meta-analytic review. *Social indicators research*, 117(1), 1-28.
- Tonge, J., Moore, S., Ryan, M. & Beckley, L. (2013). Using photo-elicitation to explore place attachment in a remote setting. *Electronic Journal of Business Research Methods*, 11(1), 41-50.
- Tosun, C. (1999). Towards a typology of community participation in the tourism development process. *Anatolia*, 10(2), 113-134.
- Tuan, Y.-F. (1975). Place: An experiential perspective. Geographical Review, 65(2), 151-165.
- Tuan, Y.-F. (1979) *Space and place : The perspective of experience*. Minneapolis: University of Minnesota Press.
- Turk, S.S. & Korthals Altes, W.K. (2010a). How suitable is LR for renewal of inner city areas? An analysis for Turkey. *Cities*, 27(5), 326-336.
- Turk, S.S. & Korthals Altes, W.K. (2010b). Potential application of land readjustment method in urban renewal: Analysis for Turkey. *Journal of Urban Planning and Development*, 137(1), 7-19.
- Watts, L. & Hodgson, D. (2019). Democracy and participation. In *Social Justice Theory and Practice for Social Work*. Singapore: Springer.
- Willson, M. (2010). Technology, Networks and Communities: An Exploration of network and community theory and technosocial forms. *Information, Communication & Society, 13(5)*, 747-764.
- Yuksel, A., Yuksel, F. & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism management*, 31(2), 274-284.

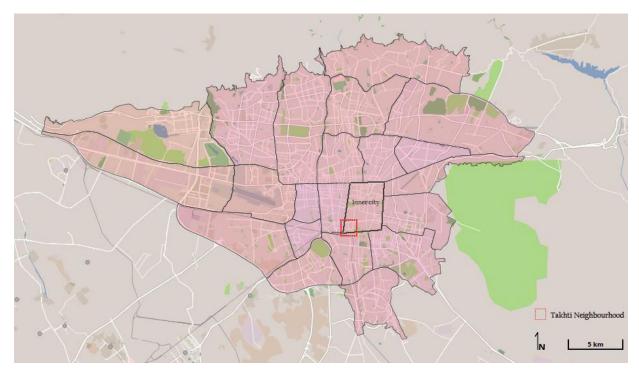


Figure 1 Location of the Takhti Neighbourhood within the city of Tehran



Figure 2 About 75 tiny plots located within Edalat Lane (left), a narrow path at the end of the lane captured in the PEI by a resident participant (right)



Figure 3 Assembled blocks in Edalat Lane reported by the local office (left), assembled blocks after the redevelopment captured in the PEI by a resident participant (right)

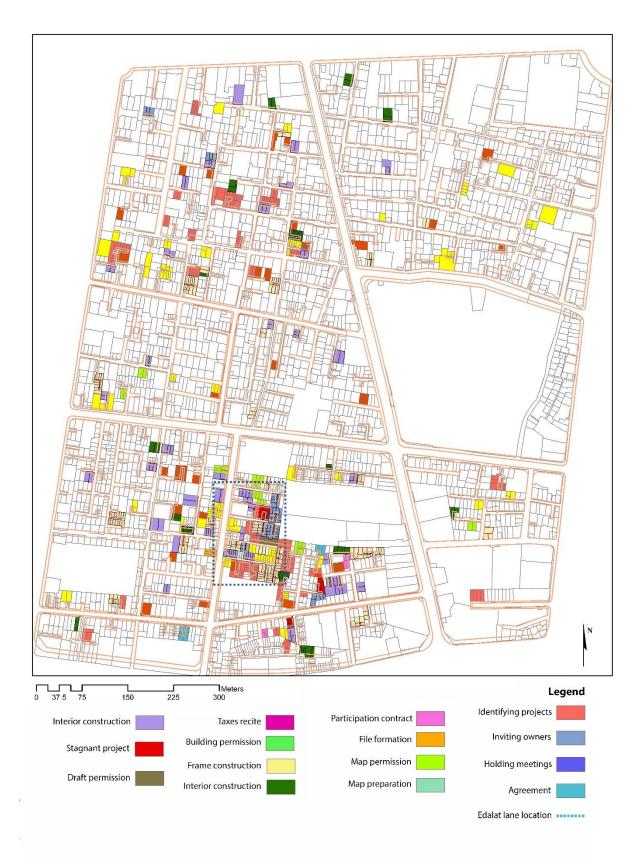


Figure 4 The progression of the redevelopment process in the Takhti neighbourhood (Local Office of Takhti, 2014). Most projects occurred around Edalat Lane at the time

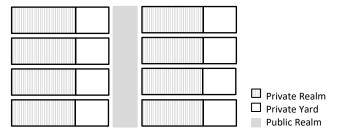


Figure 5 The division of the public and private realm in Edalat Lane before the redevelopment

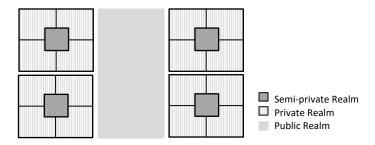


Figure 6 New common realm within the blocks of flats in Edalat Lane after the redevelopment



Figure 7 The poor conditions of indoor spaces captured in the PEI by house-dwellers



Figure 8 The environmental quality of outdoor spaces captured in the PEI by flat-dwellers

#### **Appendix A: list of questions used in the interviews**

- Questions addressing individual visual interpretive data:
- 1. Would you please tell me more about these photographs (you have taken)?
- 2. Why did you take this photograph? What does it mean to you?
- 3. What were you thinking when you took this photograph?
- 4. Would you please tell me more about this photograph? Where did you take it? Why? (Specify the location of photographs on the neighbourhood map)
- Questions addressing perceptions and meanings of places:
- 5. Have you always lived here? Has it always been like this?
- 6. How do you describe here (this neighbourhood)?
- 7. What does this place mean to you?
- 8. Do you feel you belong here? Why?
- 9. Would you be sorry to leave here and live somewhere else? If no, like where? Why?
- 10. How is your life going here? Are you satisfied living here? Why?
- 11. Would you please describe the differences between here and other places (nearby neighbourhoods)?
- 12. Would you call this neighbourhood a community? Would you describe the relationships between the neighbours here? Is it more workable, rather than intense?
- Questions addressing involvement role and experiences:
- 13. Are you involved in any participatory activities now? If so, would you please tell me more about your role?
- 14. Why did you decide to get involved? Why did/didn't you continue to be involved?
- 15. Why was the involved project/activity important to you? Is it still important? Why?
- 16. What is important to your neighbourhood community? How?
- 17. What new skills did you learn (if any)? Can you give me an example?
- 18. Did involvement lead to any changes in your life? How?
- 19. Tell me about the people you have met through participating in the project.
- 20. What do you know of other involved people/groups?
- 21. Do you think about non-owners like renters and small plot owners in the project? What happened to them?
- 22. Did you trust your neighbours/governmental institutions? Why?

- Questions addressing the effects of both process and outcomes on senses and behaviours.
- 23. What changes have you seen in the community (during/after the participatory project)? How about trust, familiarity, physical space, and the cultural landscape such as customs, food, dialect, events, characters, and religious ceremonies?
- 24. Do the changes mean strength or are they a threat to you?
- 25. Have you noticed any other social changes in the neighbourhood (during/after the participatory project)? Like what?
- 26. What kind of physical changes have you seen here?
- 27. Did the participatory project contribute to your senses of belonging? How?
- 28. Did the participatory project contribute to feelings of rootedness? Why? How?
- 29. Can you describe how your involvement has affected the way you feel about the place?
- 30. Can you describe how your involvement has affected here compared to other neighbourhoods? Why?
- 31. Are you satisfied with your neighbourhood space now after/during the participatory project? Why?
- 32. How much do you think you have in common with this place now? How was it before the intervention?
- 33. Do you think your involvement has affected your or others behaviour? How?
- 34. What do you think a new residents' sense of belonging for here might be?
- 35. Are you interested in interacting with new residents? Why?
- 36. What are your hopes for the future?
- 37. If you could have done anything differently regarding your involvement role, what would it have been? Why?
- 38. Do you trust in your neighbourhood/governmental institutions now? Why?
- 39. Would you tell me about the trust between the local office and locals? What about the trust between the Municipality and locals?
- 40. Who led the participatory project? Who guides it now? (the locals, the Municipality, the local office, other organisations)
- 41. Some people said [based on the PEI's results] they do not have a feeling for here, what do you think?
- 42. Some people here told me [based on the PEI's results] they have to live here since they are dependent on this place (e.g. job), what do you think? Why?
- 43. Some residents said they liked here and are satisfied with it [based on the PEI's results], but they think that here is not the place in which they should live, they should go somewhere else like Saadat-Abad [a well-known neighbourhood in Tehran]? How about you?
- 44. Some residents said they lost their trust/familiarity about here [based on the PEI's results], what do you think? Do you have the same opinion?
- 45. Some locals told me about their concerns about the quality of constructions or their gain/loss through the process. What do you think?

46. Some other locals told me that [], what do you think?	
•	<b>Demographic information</b> was collected at the end of each interview, including gender, ethnic group, age, ownership, length of residency, and education level.